

REMARKS

In the Office Action dated August 23, 2006, Claims 1-25 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claims 4 and 16 were rejected under 35 U.S.C. § 112, first paragraph, as reciting a term not explicitly recited in the specification. Claims 1-3, 5-15, and 17-25 were rejected under 35 U.S.C. § 102(c) as being anticipated by U.S. Patent No. 6,711,557 to Palaniappan (hereinafter "Palaniappan"). Finally, Claims 4 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Palaniappan in view of U.S. Patent Application Publication No. 2004/0006586 to Melchione et al. (hereinafter "Melchione").

Pursuant to 37 C.F.R. § 1.111 and for the reasons set forth below, applicants respectfully request reconsideration and allowance of the pending claims. In addition to presenting the reasons why applicants believe that the pending claims are in condition for allowance, a brief summary of the present invention as well as the cited references are presented. However, it should be appreciated that the brief summaries are presented solely to assist the Examiner in recognizing the differences between the pending claims and the cited reference and should not be construed as limiting upon the present invention.

Brief Summary of Present Invention

The present invention is directed to a computer-readable medium for communicating software update information. With this information, a computer user can determine the value and applicability of the software update identified by the metadata such that he/she can conserve download resources when the update is not applicable or of little value.

Information communicated by the computer-readable medium includes various logical relationships that assist determining the identity, value, and applicability of the software update to the computer user. For example, the metadata includes information identifying an update handler intended to process the software update. Those skilled in the art will appreciate that

being able to specify the update handler provides greater flexibility in the types of updates that may be processed. Relatedly, the metadata includes handler information that identifies information for executing the update handler, such as location for execution, command line arguments, and the like. Still further, elements within the metadata include relationship elements for storing defined relationships that the identified software update has to other software updates, as well as rule elements for determining the applicability of the software update to the client computer.

Brief Summaries of Cited References

Brief Summary of Palaniappan (U.S. Patent No. 6,711,557)

Palaniappan discloses a system for providing client-based background updating. In the Palaniappan system, a background process executing on a client computer periodically checks a server machine for updates that have been registered with the system. Purportedly, the background process downloads metadata regarding available updates. (Palaniappan, Col. 3, lines 61-65). Once the metadata is downloaded, the background process determines for which applications a software update is available and then notifies those applications of the available update.

While Palaniappan discloses obtaining metadata from a server regarding updates, Palaniappan fails to disclose, teach, or suggest the particular elements recited in the pending claims, including update handlers, rules for determining the applicability of the software update to the client computer, relationships with other software updates, and the like.

Brief Summary of Melchione (U.S. Application Publication No. 2004/0006586)

Melchione discloses a system for distributing software in a networked environment. Nodes in the network periodically query a data center for available updates, and if available, obtain the updates from a network location.

While Melchione stores information regarding software (including updates) on data centers, Melchione fails to disclose, teach, or suggest the particular elements recited in the pending claims, including update handlers, rules for determining the applicability of the software update to the client computer, relationships with other software updates, and the like.

35 U.S.C. § 101 Rejections

The Office Action rejected Claims 1-25 under 35 U.S.C. § 101 for two separate reasons. Both are addressed below.

As to the first Section 101 rejection, the Office Action asserted that Claims 1-25 were directed to non-statutory subject matter. More particularly, the Office Action asserted that the claimed subject matter recited data structures, rather than physical or logical relationships among the structure.

Applicants have amended Claims 1-25 to recite logical relationships among the structures. In particular, the property elements include "update handler information that identifies update handlers for installing the identified software update." Clearly, this represents a logical relationship to the identified software update in that not only is the software update identified, but an update handler/installer is identified for installing the update on a client computer.

In addition to the above recited relationships, the handler elements logically relate to the property elements in that they include information for executing the update handler identified in the property elements. As described in the specification, this handler information may include arguments to the update handler, locations for executing the update handler, and the like. Clearly, information for executing the update handler identified in another element represents a logical relationship between the two elements, as well as to the identified software update in general.

Still further, the file elements present a logical relationship to the identified software update, and also to the update handler from the property elements, in that information regarding the "payload" of the identified software update is identified. As set forth in the specification, this information includes the location of the payload, the files that comprise the payload, the types of files that comprise the payload, and the like. Clearly, file information represents an important and logical relationship to an identified software update.

As to the second Section 101 rejection, the Office Action asserted that Claims 1-25 were not directed towards a useful, tangible, and concrete result, and requested that the applicants identify the practical application and the useful, concrete, and tangible result.

Independent Claims 1 and 14 have been amended to recite the following:

wherein the at least one additional element describing pertinent aspects of the identified software update is useful for determining the value and applicability of the identified software update such that communication resources may be preserved in not obtaining the identified software update if the identified software update is of no value or inapplicable for installation on a computing system.

Support for these amendments is found on page 24, lines 7-16, and on page 26, lines 24-30.

Applicants submit that this recitation illustrates the practicality of the claims, as well as useful, tangible, and concrete results. In particular, through the provision of information relating to the identified software update, the computer user is informed as to whether or not an available software update is of any value and/or applicable to the computer user. Thus, substantial communication resources/bandwidth can be preserved since only those updates that are of value or applicable need be downloaded.

In light of the amendments to the claims and the discussion above, applicants submit that Claims 1-25 are directed to statutory subject matter and request that the 35 U.S.C. § 101 rejections be withdrawn and the claims allowed.

35 U.S.C. § 112, First Paragraph, Rejections

Claims 4 and 16 were rejected under 35 U.S.C. § 112, first paragraph, for reciting subject matter that was not described in the specification. Applicants have amended Claims 4 and 16 to recite:

wherein the identity element further identifies a revision number associated with the software update.

Support for these amendments is found on page 25, lines 9-12.

Applicants submit that in light of the amendments to Claims 4 and 6, the 35 U.S.C. § 112, first paragraph, rejections of these claims should be withdrawn.

35 U.S.C. § 112, Second Paragraph, Rejections

Claims 3, 5-13, and 17-25 were rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter regarded as the invention.

In regard to Claim 3, this claim has been amended such that the offending term "if present" is removed.

In regard to Claims 1 and 14, the recitations "zero or more" have been removed. Accordingly, references in dependent claims to elements recited in Claims 1 and 14 now have antecedent basis.

In light of the above, applicants submit that Claims 3, 5-13, and 17-25 are fully compliant with 35 U.S.C. § 112, second paragraph, and request that these rejections be withdrawn.

35 U.S.C. § 102(e) Rejections

The Office Action rejected Claims 1-3, 5-15, and 17-25 as being anticipated by Palaniappan. For the following reasons, applicants respectfully traverse the rejections.

Claim 1

As amended, Claim 1 now reads as follows:

1. A computer-readable medium storing computer-readable data organized in a tag-based data structure for communicating update metadata

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corresponding to a software update to an update service node or a client computer, comprising:

- an identifier element that uniquely identifies a software update;

- property elements storing general properties relating to the software update including update handler information identifying an update handler for installing the identified software update;

- localized property elements for storing language specific information directed to a computer user relating to the software update;

- relationship elements storing relationships the software update has to other software updates;

- rule elements storing rules for determining the applicability of the software update to a client computer;

- file elements identifying the identified software update's payload and information relating to the software update's payload; and

- handler elements storing information for executing the update handler identified in the property elements for installing the identified software update;

wherein the at least one additional element describing pertinent aspects of the identified software update is useful for determining the value and applicability of the identified software update such that communication resources may be preserved in not obtaining the identified software update if the identified software update is of no value or inapplicable for installation on a computing system.

Palaniappan discloses that a server stores various information regarding supported applications (those that can be updated via the Palaniappan system), including application, language, supported platforms, current release, system and share components, and available updates. (See, Palaniappan, Col. 3, lines 27-31.) However, while Palaniappan stores various information, applicants submit that Palaniappan fails to disclose numerous elements recited above from Claim 1. In particular, Palaniappan fails to disclose "property elements ... including update handler information identifying an update handler for installing the identified software update," "relationship elements storing relationships the software update has to other software updates," and "handler elements storing information for executing the update handler identified in the property elements for installing the identified software update."

In light of the above, applicants submit that Claim 1 is in condition for allowance. Accordingly, applicants request that the 35 U.S.C. § 102(e) rejection of Claim 1 be withdrawn and the claim allowed.

Claim 14

As amended, Claim 14 now reads as follows:

14. A computer-readable medium storing computer-readable data organized in a tag-based data structure for communicating update metadata corresponding to a software update to an update service node or a client computer, comprising:

an identifier element that uniquely identifies a software update;

property elements storing general properties relating the software update including update handler information identifying an update handler for installing the identified software update;

relationship elements storing relationships the software update has to other software updates;

file elements identifying the identified software update's payload and information describing information relating to the software update's payload; and

handler elements storing information for executing the update handler identified in the property elements for installing the identified software update;

wherein the at least one additional element describing pertinent aspects of the identified software update is useful for determining the value and applicability of the identified software update such that communication resources may be preserved in not obtaining the identified software update if the identified software update is of no value or inapplicable for installation on a computing system.

As can be seen, while varying the scope of the claimed invention, Claim 14 recites similar elements found in independent Claim 1. In particular, Claim 14 recites the following elements that are not disclosed in Palaniappan: "property elements ... including update handler information identifying an update handler for installing the identified software update," "relationship elements storing relationships the software update has to other software updates," and "handler elements storing information for executing the update handler identified in the property elements for installing the identified software update."

In light of Palaniappan's failure to disclose all elements of Claim 14, applicants submit that Claim 14 is now in condition for allowance. Accordingly, applicants respectfully request that the 35 U.S.C. § 102(e) rejection of Claim 14 be withdrawn and the claim allowed.

Claims 2-13 and 17-25

Claims 2-13 depend from independent Claim 1. Accordingly, when read in combination with independent Claim 1, applicants submit that Claims 2-13 are in condition for allowance, and request that the 35 U.S.C. § 102(e) rejections be withdrawn and the claims allowed.

In addition to depending from independent Claim 1, many of these claims include recitations that further distinguish them from Palaniappan, some of which are described below.

Claim 3

Claim 3 recites that the elements of Claim 1 are particularly ordered as they are described in Claim 1. Thus, even assuming that Palaniappan discloses the elements of Claim 1 (which applicants expressly deny), Palaniappan completely fails to disclose the particular order recited in Claim 1. Accordingly, applicants assert that Claim 3 recites additional elements that further distinguish it from the cited reference, and request that the 35 U.S.C. § 102(e) rejection of this claim be withdrawn and the claim allowed.

Claim 5

Claim 5 recites that "each relationship element includes prerequisite information that identifies a second software update that must be installed before the identified software update." Palaniappan completely fails to disclose any information regarding prerequisites, merely that a software application can download information regarding updates from a server. Accordingly, applicants assert that Claim 5 recites additional elements that further distinguish it from the cited reference, and request that the 35 U.S.C. § 102(e) rejection of this claim be withdrawn and the claim allowed.

Claim 6

Claim 6, dependent from Claim 5, recites that "each relationship element further includes information identifying a plurality of software updates joined together with Boolean operators into a logical statement, such that the evaluation of the logical statement determines the suitability of the identified software update for installation on a client computer." There is nothing within Palaniappan that discloses multiple software updates joined together with Boolean operators for determining suitability of the identified software update. Thus, as Palaniappan fails to disclose this additional recitation, applicants submit that Claim 6 is in condition for allowance, and request that the 35 U.S.C. § 102(e) rejection of this claim be withdrawn and the claim allowed.

Claim 7

Claim 7 recites that "each relationship element includes bundle information that identifies a plurality of software updates that must be installed coextensively." Nothing in Palaniappan even suggests a bundle of software updates that must be installed coextensively. Accordingly, applicants submit that Claim 7 is in condition for allowance, and request that the 35 U.S.C. § 102(e) rejection of this claim be withdrawn and the claim allowed.

Claim 8

Claim 8, dependent from Claim 7 and similar in nature to Claim 6, recites that the bundled software updates "are joined together with Boolean operators into a logical statement, such that the evaluation of the logical statement determines the suitability of the bundled software updates for installation on a client computer." As already mentioned, Palaniappan fails to disclose Boolean operators to determine the suitability of the update, or bundle of updates, for installation on a client computer. Thus, applicants submit that Claim 8 is in condition for allowance, and request that the 35 U.S.C. § 102(e) rejection of this claim be withdrawn and the claim allowed.

Claim 9

Claim 9 recites that "each relationship element includes supersedence information that identifies at least one other software update that is superseded by the identified software update." Palaniappan completely fails to disclose relationship elements and, in particular, relationship elements that include supersedence information. Accordingly, applicants submit that Claim 9 is in condition for allowance, and request that the 35 U.S.C. § 102(e) rejection of this claim be withdrawn and the claim allowed.

Claim 10

Claim 10 recites that relationship elements include those elements recited in Claims 5, 7, and 9, as discussed above. Palaniappan completely fails to disclose these elements. Accordingly, applicants submit that Claim 10 is in condition for allowance, and request that the 35 U.S.C. § 102(e) rejection of this claim be withdrawn and the claim allowed.

Claims 17-25

Claims 17-25 depend from independent Claim 14 and recite similar elements to those described above in regard to Claims 2-13. Accordingly, applicants submit that these claims are in condition for allowance, and request that the 35 U.S.C. § 102(e) rejections of these claims be withdrawn and the claims allowed.

35 U.S.C. § 103(a) Rejections

The Office Action rejected Claims 4 and 16 over Palaniappan in view of Melchione, suggesting that Palaniappan discloses all elements except a unique identifier sub-element, but that Melchione discloses a unique identifier sub-element.

Applicants agree that Palaniappan fails to disclose a unique identifier that identifies the software update. However, applicants traverse the suggestion that Melchione discloses a unique identifier in an identity element on a computer-readable medium.

The Office Action points to Melchione, Figures 11-14, as disclosing the unique identifier in an identity element on computer-readable media. However, applicants have reviewed the cited figures and find nothing to suggest that an identity element on computer-readable media includes an identifier that uniquely identifies the corresponding software update. In Figure 14, Melchione displays various "NET-IDs" that are stored in an inventory server at a data center. However, a review of the corresponding discussion of this figure fails to disclose, teach, or suggest that the NET-IDs identify a software update; nor are they distributed in computer-readable media as part of update information.

In addition to Melchione failing to disclose the unique identifier, applicants further point out that Claims 4 and 16 depend from Claims 1 and 14, both of which are in condition for allowance. Moreover, the addition of Melchione to Palaniappan fails to make up the deficiencies of Palaniappan to the independent claims.

In light of the above, applicants submit that Palaniappan and Melchione, alone and in combination, fail to disclose, teach, or suggest each element of Claims 4 and 16. Accordingly, applicants request that the 35 U.S.C. § 103(a) rejection of these claims be withdrawn and the claims allowed.

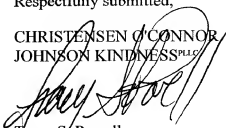
CONCLUSION

In view of the amendments and remarks above, applicants respectfully submit that the present application is in condition for allowance. Reconsideration and reexamination of the application, as amended, and allowance of the claims at an early date are solicited. If the

Examiner has any questions or comments concerning the foregoing response, the Examiner is invited to contact the applicants' undersigned attorney at the number below.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Tracy S. Powell", is written over the printed name and firm name.

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